Criteria wise Evaluation Guidelines and Document Verification during NBA team visit
(Tier – II Institution)

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Criteria wise Marks

Criteria No.	Criteria	Tier – I Marks	Tier-II Marks
	Programme Level Criteria		
1	Vision, Mission and Program Educational Objectives	50	60
2	Program Curriculum and Teaching-Learning Processes	100	120
3	Program Outcomes and Course Outcomes	175	120
4	Students' Performance	100	150
5	Faculty Information and Contributions	200	200
6	Facilities and Technical Support	80	80
7	Continuous Improvement	75	50
	Institute Level Criteria		
8	First Year Academics	50	50
9	Student Support Systems	50	50
10	Governance, Institutional Support, and Financial Resources	120	120
	Total	1000	1000

Criteria -1

Criteria- 1-Allocation of Marks (Tier-II)

Sub Criteria	Allocation of Marks
1.1 State the Vision and Mission of the Department and Institute	5
1.2 State the Program Educational Objectives (PEOs)	5
1.3 Indicate where and how the Vision, Mission and PEOs are published and disseminated among stakeholders	10
1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program	25
1.5 Establish consistency of PEOs with Mission of the Department	15
Total	60

Sub- Criteria-1.1 and 1.2

Evaluation/Guideline	Marks	Exhibits/Context to be Observed/Assessed
Sub-Criteria- 1.1 (Marks-5)		
Availability of the Vision & Mission statements of the Department	01	Availability of the Vision & Mission statements of the Department
Appropriateness/Relevance of the Statements	02	Appropriateness/Relevance of the Statements: Correctness from definition perspective (Subjective evaluation by the visiting team)
Consistency of the Department statements with the Institute statements	02	Consistency of the Department statements with the Institute statements (Subjective evaluation by the visiting team)
Sub-Criteria- 1.2 (Marks-5)		
Listing of the Program Educational Objectives (3 to 5) of the program under consideration	05	Availability and correctness of the PEO statements (Subjective evaluation of the correctness by the visiting team)

Sub- Criteria- 1.3 (Allocation of Marks)

S.N.	Evaluation Guidelines	Marks
1.3.1	Adequacy in respect of publication & dissemination	02
1.3.2	Process of dissemination among stakeholders	02
1.3.3	Extent of awareness of Vision, Mission & PEOs among the stakeholders	06
	Total	10

Sub- Criteria- 1.3....Cont.

Evaluation	Exhibits/Context to be Observed/Assessed
Adequacy of dissemination of Vision, Mission and PEOs of the Department	Availability
	On Institute website under relevant program link
	On the department notice boards
	In HoD's Chamber; Faculty rooms
	In Laboratories, Classrooms, Library and Seminar Hall of the department
	Department website, if available
	In department level documents/course of study including Test Booklets, Laboratory Records etc

Sub- Criteria- 1.3....Cont.

Evaluation	Exhibits/Context to be Observed/Assessed
Process of dissemination among stakeholders	Documentary evidence to indicate the process which ensures awareness among internal and external stakeholders with effective process implementation
	Internal Stakeholders: Include Management, Members of bodies like Governing Board, Academic Council; faculty, support staff, students etc.
	External Stakeholders: Include alumni, employers, industry etc
	A process must be established and implemented to ensure that the information regarding the Vision, Mission and PEOs of the Department is disseminated periodically and also when the stake holders change
	A department-level committee must be constituted to ensure such timely dissemination of the information
	Records of communication must be maintained

Sub- Criteria- 1.3....Cont.

Evaluation	Exhibits/Context to be Observed/Assessed
Extent of awareness of Vision, Mission & PEOs among the stakeholders	Based on interaction with internal and external stakeholders
	Essential that all the stake holders are well aware of the Vision, Mission and PEOs of the Department
	Such an awareness must get reflected clearly during the interactions with the visiting team
	It would be helpful if the department discusses its Vision, Mission and PEOs in all its periodic meetings with the stake holders

Sub- Criteria- 1.4

Evaluation	Marks
Description of process involved in defining the Vision, Mission of the Department	10
Description of process involved in defining the PEOs of the program	15
Total	25

Sub- Criteria- 1.4   cont.

Evaluation Guideline	Exhibits/Context to be Observed/Assessed
Description of process involved in defining the Vision, Mission of the Department (NOTE: The department can depict this process pictorially in a diagram such as a flow-chart. This is strongly recommended)	Documentary evidence to indicate the process which ensures effective participation of internal and external department stakeholders with effective process implementation (Outline of Process)
	Brain storming with all the stake holders concerned including Management, Faculty, Current Students, Alumni, Employers, and Industry Experts
	Formulation of the Vision and Mission statements
	Validation by experts from academia and industry
	It is a good practice to establish a department – level committee that can assume responsibility for this process
	The vision and mission of the institute must be defined first
	The vision and mission of the department must be compatible with the vision and mission of the institute
	The vision and mission statements must be reviewed periodically to ensure their quality and relevance. Such a review can be done once every 5-6 years

Sub- Criteria- 1.4.....cont.

Evaluation Guideline	Exhibits/Context to be Observed/Assessed
Description of process involved in defining the PEOs of the program	The process for defining the PEOs is broadly similar to the process for defining the Vision and Mission of the department
	Brainstorming among stake holders, validation by experts, iterations as required and so on
	the PEOs are to be correlated to the elements of Mission statements of the department

Sub-Criterion 1.5

Evaluation Guideline	Marks
Preparation of a matrix of PEOs and elements of Mission statement	05
Consistency/justification of correlation parameters of the above matrix	10
Total	15

Sub- Criteria- 1.5…..cont.

Evaluation Guideline					Exhibits/Context to be Observed/Assessed
Preparation of a matrix of PEOs and elements of Mission statement					Availability of a matrix having PEOs and Mission elements
PEO	M$_1$	M$_2$		M$_K$	M1, M2. . . Mk are distinct elements of Mission statements
PEO1					They need not be full mission statements; they are elements of these statements
PEO2					Enter correlation levels 1, 2 or 3
					1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)
PEOn					

Sub- Criteria- 1.5…..cont.

Evaluation Guideline	Exhibits/Context to be Observed/Assessed
Consistency/justification of correlation parameters of the above matrix	Consistency/justification of correlation parameters of the above matrix
	Every mapping between a PEO and an element of Mission statement shown in the matrix must be justified
	The justification may be presented in one or two sentences
	Quality of the justifications is evaluated by the visiting team. This will be based on the perception of the evaluators
	Let the justification be logical and to the point. It is better to avoid verbose and vague justifications

Criteria-2

Allocation of Marks

Sub-Criterion	Tier I	Tier II
2.1 Program Curriculum	30	20
2.2 Teaching-Learning Processes	70	100
TOTAL	100	120

Sub-Criterion 2.1: Program Curriculum Tier II Institute

Sub-Criteria and Allocation of Marks

Sub-Criteria	Marks
2.1.1 State the process used to identify extent of compliance of the University curriculum for attaining the POs and PSOs; mention the identified curricular gaps, if any	10
2.1.2 State the delivery details of the content beyond the syllabus for the attainment of POs & PSOs	10
TOTAL	20

Note: In case all POs & PSOs are being demonstrably met through University Curriculum then 2.1.2 will not be applicable and the weightage of 2.1.1 will be 20.

Sub-Criterion 2.1.1

Evaluation Guidelines

State the process used to identify extent of compliance of the University curriculum for attaining the POs and PSOs; (6 Marks)

Mention the identified curricular gaps, for attainment of defined POs and PSOs if any (04 Marks)

Exhibits/Context to be Observed/Assessed:

Documentary evidence to indicate the process which ensures mapping/compliance of University Curriculum with the POs & PSOs; Identification of gaps; if any.

Effective participation of internal and external department stakeholders with effective process implementation

Sub-Criterion 2.1.1.......... Contd.

Process mapping/compliance of Curriculum with the POs & PSOs

Program Articulation Matrix depicting the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (PSOs) with Column averages.

A sparse column shows that the corresponding PO/PSO is not adequately addressed by the curriculum.

Expectations from relevant organizations like AICTE, ACM/IEEE, Industry may also be considered

Identified curricular gaps, if any, listed along with the justifications for the appropriateness of the identified gaps.

Process document and implementation records must be available

Sub-Criterion 2.1.2

State the delivery details of the content beyond the syllabus for the attainment of POs & PSOs

Evaluation Guidelines:

A.   Steps taken to get identified gaps included in the curriculum.

     (e.g. letter to University/BOS) (2 Marks)

B. Delivery details of content beyond syllabus (5 Marks)

C. Mapping of content beyond syllabus with the POs & PSOs (3 Marks)

Sub-Criterion 2.1.2... Contd.

A. Steps taken to get identified gaps included in the curriculum

Exhibits/Context to be Observed/Assessed:

(A. Documentary evidence of steps taken at regular interval.)

- A letter to the Affiliating University and Chairperson, University BoS, through proper channel, providing inputs and suggestions regarding curricular gaps and possible addition of new content/add-on courses in the curriculum, to bridge the gap and to better attain program outcome(s).

- Have evidence of such a communication.

- Have evidence of periodic follow-up action.

Sub-Criterion 2.1.2... Contd.

B. Delivery details of content beyond syllabus.

Exhibits/Context to be Observed/Assessed (continued):

(B. Delivery details of content beyond syllabus.)

o Documentary evidence of delivery details of content beyond syllabus, year-wise, in the specified format.

- Content beyond syllabus may include additional course / learning material / content / laboratory experiments / projects etc.

- The mapping between additional content and the POs/PSOs addressed by that content must be justifiable.

- It is a good practice to analyze the impact of the additional content delivered.

2.1.2- Delivery details of content beyond syllabus..............Contd.

- The delivery details must be provided for the past three academic years.

- Format in which delivery details of additional contents are to be provided:

Sl. No.	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	% of Students	Relevance to POs, PSOs
.						

Sub-Criterion 2.1.2... Contd.

C. Mapping of content beyond syllabus with the POs & PSOs

Exhibits/Context to be Observed/Assessed (continued):

(C. Mapping of content beyond syllabus with the POs & PSOs.)

- Availability and appropriateness of Mapping table between contents delivered and Program outcomes/ Program specific outcomes (Course outcomes)

- As already noted, the mapping between the additional contents delivered and POs / PSOs must be available and appropriate.

Sub-Criterion 2.2- Teaching-Learning Processes

Allocation of Marks

Evaluation Guideline	Tier I	Tier II
2.2.1 Describe the Process followed to improve quality of Teaching Learning	15	25
2.2.2 Quality of end semester examination, internal semester question papers, assignments and evaluation*	15	20
2.2.3 Quality of student projects	20	25
2.2.4 Initiatives related to industry interaction	10	15
2.2.5 Initiatives related to industry internship/summer training	10	15
TOTAL	70	100

* Quality of End semester examination is not relevant for Tier II institutes.

Sub-Criterion 2.2.1- To improve quality of Teaching - Learning

Evaluation Guidelines:

Evaluation Guideline	Tier I	Tier II
A. Adherence to Academic Calendar	2	3
B. Pedagogical initiatives	2	3
C. Methodologies to support weak students and encourage bright students	2	4
D. Quality of classroom teaching (Observation in a Class)	2	3
E. Conduct of experiments (Observation in Lab)	2	3
F. Continuous Assessment in the laboratory	3	3
G. Student feedback of teaching - learning process and actions taken	2	6
TOTAL	15	25

Sub-Criterion 2.2.1: Guidelines & Exhibits

A. Describe the Process followed to improve quality of Teaching - Learning

Exhibits:

Availability of Academic Calendar based on University academic calendar and its effective compliance.

o Any institute generally has an academic calendar that is based on the academic calendar of the University!

o The department must have records showing compliance to such a calendar! The records must show that the academic events (like internal tests) are being organized as per the schedule. Any deviations must be recorded along with the reasons for the deviations.

B. Pedagogical initiatives

Exhibits:

Documentary evidence to support implementation of pedagogical initiatives such as real-life examples, collaborative learning, ICT supported learning, interactive classrooms etc.

- o Documentary evidence must be available for every pedagogical initiative claimed by the department.
- o Lesson plans, Teaching diaries must show evidence of the initiative being planned and implemented.
- o It is desirable to assess the impact of the initiative also. (Survey).

Sub-Criterion 2.2.1: Guidelines & Exhibits...... Contd.

C. Methodologies to support weak students and encourage bright students

Exhibits:

Guidelines to identify weak and bright students; post identification actions taken; impact observed.

o Written procedure must be available for identifying weak and bright students. Evidence of following this procedure must be available.

o Records of initiatives like remedial classes for weak students must be maintained. Records of initiatives like optional assignments to challenge bright students must be maintained.

o Records of impact analysis must be available.

Sub-Criterion 2.2.1: Guidelines & Exhibits...... Contd.

D. Quality of classroom teaching

Exhibits / Context:

Classroom ambience; efforts to keep students engaged (also to be verified during interaction with the students).

E. Conduct of experiments

Exhibits / Context:

Quality of laboratory experience with respect to conducting, recording observations, analysis etc.(also to be verified during interaction with the students)

F. Continuous Assessment in the laboratory

Exhibits / Context:

Internal Semester examination and internal marks thereof, Practical record books, each experiment assessment, final marks based on assessment of all the experiments and other assessments; if any.

o   Records must be available showing assessment of each experiment, final assessment; internal examination marks if relevant, and so on.

Sub-Criterion 2.2.1: Guidelines & Exhibits..... Contd.

G. Student feedback of teaching learning process and actions taken

Exhibits / Context:

Feedback format, frequency, analysis and actions taken (also to be verified during interaction with students)

All institutes generally collect student feedback. Format and frequency are also generally defined explicitly

However, many departments do not have any records showing the analysis of the feedback data! Nor do they have records of any actions taken!

it is essential to analyze the feedback data, take appropriate actions and maintain relevant records

Sub-Criterion 2.2- Quality of end semester examination, internal semester question papers, assignments and evaluation

Evaluation Guideline	Tier -II
A. Process for internal semester question paper setting and evaluation and effective process implementation	5
B. Process to ensure questions from outcomes/learning levels perspective	5
C. Evidence of COs coverage in class test / mid-term tests	5
D. Quality of Assignment and its relevance to COs	5
Total	20

Sub-Criterion 2.2.2: Guidelines & Exhibits

A. Process for internal semester question paper setting and evaluation and effective process implementation

Exhibits:

Process of internal semester question paper setting, model answers, evaluation and its compliance.

o   Process document (Schedule, Format including tags etc)

o   Implementation records

B. Process to ensure questions from outcomes/learning levels perspective

Exhibits:

Question paper validation to ensure desired standard from outcome attainment perspective as well as learning levels perspective.

o   QP scrutiny committee must be established. What should be its composition?

o   Process for QP validation must be available.

o   Implementation records must be available. (Information about Rejected/ Modified Question Papers must also be maintained.)

Sub-Criterion 2.2.2: Guidelines & Exhibits

C. Evidence of COs coverage in class test / mid-term tests

Exhibits:

Mapping of questions with the Course outcomes

- Questions must be tagged with COs

- The mapping must be justified.

- Must ensure that all COs are addressed.

- Should the tags be exposed to the students?

Sub-Criterion 2.2.2: Guidelines & Exhibits

D. Quality of Assignment and its relevance to COs

Exhibits:

Assignments to promote self-learning, survey of contents from multiple sources, assignment evaluation and feedback to the students, mapping with the COs.

- Evaluation of assignments and providing feedback to the students are essential! These activities represent substantial load on the faculty!

- Assignments also must be mapped to COs. The mapping must be justifiable.

- Many departments treat "assignments" too casually! This must be avoided.

Sub-Criterion 2.2.3-Quality of student projects.

Evaluation Guidelines:

Evaluation Guideline	Tier II
A. Identification of projects and allocation methodology to Faculty Members	3
B. Types and relevance of the projects and their contribution towards attainment of POs and PSOs	5
C. Process for monitoring and evaluation	5
D. Process to assess individual and team performance	5
E. Quality of completed projects/working prototypes	5
F. Evidences of papers published /Awards received by projects etc.	2
TOTAL	25

Sub-Criterion 2.2.3: Guidelines & Exhibits

A. Identification of projects and allocation methodology to Faculty Members.

Exhibits:

Projects identification and guide allocation Process.

o   Project is a curricular component for most of the departments. They do follow a process. However, some may not have a process document indicating the details of guidelines for project identification and allocation of project guides. They may be following informal procedures!

o   It is essential to have a process document and implementation records for the project work.

o   Better to have an institute-wide process, common for all the programs.

Sub-Criterion 2.2.3: Guidelines & Exhibits........Contd.

B. Types and relevance of the projects and their contribution towards attainment of POs and PSOs.

Exhibits:

Projects classification (application, product, research, review etc); consideration to factors such as environment, safety, ethics, cost, standards and mapping with POs and PSOs.

o   Process document must indicate that the project must consider factors such as environment as indicated above.

o   Rubrics for project evaluation must include these attributes also.

o   Periodic monitoring also must consider these factors.

D. Process for monitoring and evaluation. (Guideline C for Tier II Institute.)

Exhibits / Context:

Continuous monitoring mechanism and evaluation.

o Process document must include guidelines for periodic monitoring, evaluation, and the periodicity.

o Appropriate rubrics for evaluation must be developed and shared with students up front (as discussed in Module 2).

o Implementation records must be maintained.

Sub-Criterion 2.2.3: Guidelines & Exhibits........Contd.

E. Process to assess individual and team performance. (Guideline D for Tier II Institute.)

Exhibits / Context:

Methodology (Appropriately documented) to assess individual contribution/ understanding of the project as well as collective contribution / understanding.

o   Process must include appropriate rubrics.

o   The methodology must be documented, and implementation records must reflect adherence to the documented methodology.

o   A good practice is to share these details with students up front.

Sub-Criterion 2.2.3: Guidelines & Exhibits........Contd.

F. Quality of completed projects/working prototypes. (Guideline E for Tier II Institute.)

Exhibits / Context:

Based on Projects demonstration.

G. Evidences of papers published /Awards received by projects etc. (Guideline F for Tier II Institute.)

Exhibits / Context:

Quality of place (host) where the paper has been published /quality of competition in which award has

been won. (All the relevant details must be readily available for inspection by the visiting team.)

Sub-Criterion 2.2.4-Initiatives related to industry interaction

Evaluation Guidelines:

Evaluation Guideline	Tier II
A. Industry supported laboratories.	5
B. Industry involvement in the program design and partial delivery of any regular courses for students.	5
C. Impact analysis of industry institute interaction and actions taken thereof.	5
TOTAL	15

Sub-Criterion 2.2.4: Guidelines & Exhibits

- Industry supported laboratories.

Exhibits: Type of Industries, Type of Labs, objectives, utilization and effectiveness

- Industry involvement in the program design and partial delivery of any regular courses for students. (Shown as two separate guidelines for Tier I Institute.)

Exhibits: Documentary evidence

- Impact analysis of industry institute interaction and actions taken thereof.

Exhibits: Analysis and actions taken thereof.

o Impact analysis can be based on Surveys. Actions must be taken based on the impact analysis and these actions must be recorded.

Sub-Criterion 2.2.5-Initiatives related to industry internship / summer training

Evaluation Guidelines:

Evaluation Guideline	Tier I	Tier II
A. Industrial training/tours for students.	2	3
B. Industrial internship / summer training of more than two weeks and post training assessment.	3	4
C. Impact analysis of industrial training.	2	4
D. Student feedback on initiatives.	3	4
TOTAL	10	15

Sub Criterion 2.2.5: Exhibits

Documentary Evidence

A and B: Type of Industries, planned or non-planned activity, objectives clearly defined, Number of students participated, relevant area of training, visit report.

C and D: Impact analysis and feedback format, analysis and actions taken. (Also to be verified during interaction with students)

All the sources used for presentation are duly acknowledged by the author

Thanks